



Announcement

King Mongkut's Institute of Technology Ladkrabang Doctoral Scholarships Academic Year 2021

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King Mongkut's Institute of Technology Ladkrabang (KMITL) invites qualified applicants to apply for KMITL's Full Doctoral Scholarships in Academic Year 2021. The Scholarships are supported by the board of KMITL's Research Funds and the board of KMITL's Human Resource Funds in the title of KMITL Doctoral Scholarships. The scholarships aim to produce highly qualified Ph.D. researchers from KMITL.

1. Number of scholarships

- 1.1 For Thai student: 10 scholarships.
- 1.2 For International student: 20 scholarships.

The scholarships will be provided within 3 consecutive academic years for graduate students or 5 consecutive academic years for undergraduate students. Scholarships are given based on the applicant's qualifications and their advisor's qualifications.

The judgment of the committee is final.

2. Applicant Eligibility

- 2.1 Applicants must be under the age of 40 years at the date of the application deadline.
- 2.2 **For undergraduate students:** Applicants must have a bachelor's degree with a GPA of at least 3.25 on the 4.0 scale OR have research publication(s), Innovation, a Patent, a Pretty Patent or Award as a preference and **don't currently study a master's degree at KMITL**.
- 2.3 **For graduate students:** Applicants must have a bachelor's degree with a GPA of at least 3.0 on the 4.0 scale, AND a master's degree in a discipline related to the proposed doctoral study with a GPA of at least 3.5 on the 4.0 scale OR have research publication(s), Innovation, a Patent, a Pretty Patent or Award as a preference and **don't currently study a doctoral degree at KMITL**.
- 2.4 Applicants must have an English proficiency test result that meets at least one of the following requirements:

E. Saosinwong

English Test Requirement	Minimum score*
TOEFL (paper-based)	450
TOEFL (computer-based)	133
TOEFL (internet-based)	45
IELTS	4.0
CU-TEP	45
KMITL-TEP	B1

*(Scores must be valid on the date of the application deadline)

2.5 Applicants must choose their academic program listed in *Appendix B*.

3. Application Schedule

The application Submission period is from now until **April 2, 2021**

The deadline for application submission is Friday, April 2, 2021 at 6 p.m. (Thailand local time).
No extensions of the deadline will be granted under any circumstances.

4. Application Submission

Please download and fill out an application form from the website <http://hr.kmitl.ac.th> and submit the application form and supporting documents to the Human Resource Management Office, 5th floor, President’s Building, King Mongkut’s Institute of Technology Ladkrabang **OR** by Email: hr@kmitl.ac.th (**with the email subject: “Application for KMITL Doctoral Scholarships 2021_ your name _Surname”**)

For example: Application for KMITL Doctoral Scholarships 2021_Hasakam_Thongzunhor.

For more information, please contact the Human Resource Management Office at the President’s Building, King Mongkut's Institute of Technology Ladkrabang (KMITL), Email: hr@kmitl.ac.th, or Phone number +662-329-8000 ext. 3271 (Ms. Hasakarn).

5. Supporting documents

- 5.1 KMITL Doctoral Scholarship Application Form with a photograph taken not more than 6 months before the deadline of application.
- 5.2 A certified copy of your Bachelor’s Degree Transcript for undergraduate students, **OR** a copy of your Bachelor’s Degree and Master’s Degree Transcript for graduate students.
- 5.3 A certified copy of your Identification Card or Passport.
- 5.4 A certified copy of your English proficiency test result.
- 5.5 A letter of Recommendation for the KMITL Doctoral Scholarship (if any).
- 5.6 Other related documents (if any).

C. Loosimontorn

6. Scholarship Offer

- 6.1 Tuition fees
- 6.2 Salary
 - a) For undergraduate students:
 - 12,000 baht/month, but not exceeding 60 months
 - 18,000 baht/month, but not exceeding 63 months
 - b) For graduate students
 - 12,000 baht/month, but not exceeding 36 months
 - 18,000 baht/month, but not exceeding 39 months
- 6.3 Short-term Overseas Research fund for **Thai students** (400,000 baht)
- 6.4 An economy class air ticket for International students

7. Scholarship Decision

A list of the scholars will be announced by the Human Resource Management Office at <http://hr.kmitl.ac.th> on April 30, 2021

8. Terms and Conditions of the Scholarship

- 8.1 In the case that the scholar receives other scholarships due to inappropriate reasons, the scholarship will be terminated.
- 8.2 The scholar has to be KMITL staff in the position of a Research Assistant.
- 8.3 The scholar should be fully aware, eager, and willing to reap academic and other activities.
- 8.4 The scholar must confirm to study within 30 days via email after the date of the scholarship decision announcement has been published.
- 8.5 The scholar must sign a contract within 30 days before the start of the semester. The scholar will study in the 1st semester (August 2021) **OR** 2nd semester (January 2022).
- 8.6 The scholar must submit a progress report at the end of every semester in order to receive the next installment of funding.
- 8.7 The scholar has to comply with the following:
 - a) The scholar has to publish a research paper that has been accepted in the international journal (Full Paper) indexed as Q1 or Q2 or Q3 in the Web of Science; at least 1 publication **OR** indexed as Q1 or Q2 by the Scimago Journal Ranking. The paper must have the scholar's name as a first author and advisor's name **OR** any other workpiece such as patented product, innovative product, creative design, commercial or public model - 1 piece (within 3 years for undergraduates and 2 years for graduates).
 - b) Acknowledgment must be stated as follows: *"This work was supported by King Mongkut's Institute of Technology Ladkrabang."*



- c) The scholarship providers and the scholars have mutual proprietary rights to any research results that come out from the project.
- d) The research benefit distribution must follow KMITL's regulations.
- e) In the case that the scholar and advisor cannot meet the project's target without valid reasons, the scholar and advisor will no longer obtain any further scholarships from KMITL.

9. Scholarship cancellation

- 9.1 The scholar leaves education, retires or has been revoked from Ph.D. Student status as a punishment.
- 9.2 The scholar breaches KMITL policies and procedures, rules, and/or regulations.
- 9.3 The scholar has received other scholarships instead.
- 9.4 The scholar fails to meet the criteria or terms and conditions of the scholarship.
- 9.5 The scholar is not able to complete his/her course within the scholarship period.

The KMITL Doctoral Scholarship committee may make any decisions regarding changes to the agreements and regulations.

The interpretation and construction of any terms or conditions of this announcement or other matters related to this Scholarship shall be final and conclusive by the President.

Announced on February 8, 2021



(Assoc.Prof.Dr. Chamroon Laosinwattana)

Executive Vice President for Human Resource Development
Acting as President

Doctoral Degree Admission Calendar
 KMITL Doctoral Scholarships
 Beginning Academic Year 2021

Details	Date
1. To apply, please download and fill out an application form from the website http://hr.kmitl.ac.th/ and send us your application and relevant documents by Email to: hr@kmitl.ac.th (with the email subject: “ Application for KMITL Doctoral Scholarship and your name ”); or at the Human Resource Management Office on the 5 th floor at the President’s Building.	Now – April 2, 2021
2. Selection Period	April 2021
3. Announcement of successful students	April 30, 2021
4. Confirmation period	May 1 – 28, 2021
5. Contract signing period for Academic Year 1/2021	July 1 – 31, 2021
6. Contract signing period for Academic Year 2/2021	December 1 – 30, 2021
7. Academic Year 1/2021 Academic Year 2/2021	Start at the beginning of August 2021 Start at the beginning of January 2022

C. Laosmetha

Appendix A - GPA Conversion Table.

4.00 Scale	4.30 Scale	4.50 Scale	5.00 Scale	100 Points Scale
3.97 – 4.00	4.26 – 4.30	4.46 – 4.50	4.95 – 5.00	100
3.92 – 3.96	4.22 – 4.25	4.41 – 4.45	4.90 – 4.94	99
3.88 – 3.91	4.17 – 4.21	4.36 – 4.40	4.84 – 4.89	98
3.84 – 3.87	4.12 – 4.16	4.31 – 4.35	4.79 – 4.83	97
3.80 – 3.83	4.08 – 4.11	4.26 – 4.30	4.73 – 4.78	96
3.75 – 3.79	4.03 – 4.07	4.21 – 4.25	4.68 – 4.72	95
3.71 – 3.74	3.98 – 4.02	4.16 – 4.20	4.62 – 4.67	94
3.67 – 3.70	3.93 – 3.97	4.11 – 4.15	4.57 – 4.61	93
3.62 – 3.66	3.89 – 3.92	4.06 – 4.10	4.51 – 4.56	92
3.58 – 3.61	3.84 – 3.88	4.01 – 4.05	4.45 – 4.50	91
3.49 – 3.57	3.75 – 3.83	3.91 – 4.00	4.34 – 4.44	90
3.41 – 3.48	3.65 – 3.74	3.81 – 3.90	4.23 – 4.33	89
3.32 – 3.40	3.56 – 3.64	3.71 – 3.80	4.12 – 4.22	88
3.24 – 3.31	3.46 – 3.55	3.61 – 3.70	4.01 – 4.11	87
3.15 – 3.23	3.37 – 3.45	3.51 – 3.60	3.90 – 4.00	86
3.07 – 3.14	3.27 – 3.36	3.41 – 3.50	3.79 – 3.89	85
2.98 – 3.06	3.18 – 3.26	3.31 – 3.40	3.68 – 3.78	84
2.90 – 2.97	3.09 – 3.17	3.21 – 3.30	3.57 – 3.67	83
2.81 – 2.89	2.99 – 3.08	3.11 – 3.20	3.45 – 3.56	82
2.72 – 2.80	2.90 – 2.98	3.01 – 3.10	3.34 – 3.44	81
2.64 – 2.71	2.80 – 2.89	2.91 – 3.00	3.23 – 3.33	80

C. Laasman

Appendix B
The list of Academic Programs.

Applicants must choose an academic program from the list of Academic Programs only.
For more information, please visit <http://reg.kmitl.ac.th/curriculum/index.php>.

No.	Program / Scope and Specialized field of Research
Faculty of Engineering	
1	Doctor of Engineering (Industrial Engineering) 1. Metal joining processes (Brazing, Soldering and Resistance welding) 2. Other related fields.
2	Doctor of Engineering (Agricultural Engineering) 1. Near infrared spectroscopy of agricultural product and food. 2. Texture studies 3. Processing and Preservation of Food and Agricultural Products. 4. Drying Technologies and Drying Modeling. 5. Rice Research and Development. 6. Statistics for Agricultural Research. 7. Other related fields.
3	Doctor of Engineering (Biomedical Engineering) 1. Advanced Artificial intelligent cancer localization in radiotherapy 2. Biomedical device development in Hospital 3. Sensors and measurement of climate exchange in the world 4. Smart AI (Artificial intelligent) in space and aerospace 5. Galaxy explore by Radion Astronomy 6. Other related fields.
4	Doctor of Engineering (Civil Engineering) 1. Geotechnical Engineering. 2. Soil Stabilization, Geosynthetics and Ground Improvement. 3. Underground and Tunnel Construction. 4. Finite Element Analysis. 5. Natural product development. 6. Other related fields.

C. Laosthankor

No.	Program / Scope and Specialized field of Research
5	<p>Doctor of Engineering (Electrical Engineering)</p> <ol style="list-style-type: none"> 1. Power System Optimization 2. Power System Analysis 3. AI in Power System 4. Piezoelectric and triboelectric materials for actuating and sensing applications. 5. Energy harvesting and power conversion. 6. Microelectromechanical systems (MEMS). 7. Medical devices. 8. IoT and embedded systems. 9. Other related fields.
6	<p>Doctor of Engineering (Food Engineering)</p> <ol style="list-style-type: none"> 1. Food processing, Food processing by heat, Prototype development and manufacturing processes and food products, Sensory quality assessment, Engineering properties of food and Design, implementation and testing of computer program in the area of Food Engineering. 2. Other related fields.
7	<p>Doctor of Engineering (Mechanical Engineering)</p> <ol style="list-style-type: none"> 1. Internal Combustion Engines, Fuels, Engine's Emissions 2. Soot and Particulate Matters, Particulate Filters 3. Lubricants and Metallic Wear 4. Automotive Components Design and Engineering 5. Carbon Fiber and Composites. 6. Other related fields.
8	<p>Doctor of Engineering (Robotics and Computational Intelligence Systems)</p> <p>**Multi-Disciplinary Program</p> <ol style="list-style-type: none"> 1. Any field that related to Robotics, AI, Intelligence systems, Data analytics, Computational Intelligence, Computer, Communication, or Control Engineering, Machine vision and Manufacturing 2. Other related fields.

C. Loosmelle

No.	Program / Scope and Specialized field of Research
Faculty of Agriculture Technology	
9	<p>Doctor of Philosophy (Agriculture)</p> <ol style="list-style-type: none"> 1. Natural Product Development for Agriculture 2. Allelopathy 3. Weed Management 4. Modeling for predict soil fertility, nutrient requirement and fertilization rates. 5. Plant nutrition decision support system for crop production. 6. Impact of plant nutrient management, crop residue management and agricultural practise to environment. 7. Soil science focus in soil chemistry, soil and plant analysis and plant nutrition. 8. Agro-ecosystem modelling. 9. Bacteria, a nature of bacteria such as Wolbachia 10. Natural products from herbs for control mosquito vectors and howsefly. 11. Ruminants Nutrition 12. Rumen ecology and microorganism in the rumen 13. Improving nutritional value of local feed resources and agricultural and food industrial by-products by using microorganism 14. Manipulation ruminal ecosystem for decrease methane production from ruminants 15. Feed for ruminants (Dairy cows and Beef cattle) 16. Soil microbial activity and enzyme 17. Bioremediation 18. Agricultural waste utilization 19. Organic fertilizers 20. The interaction between plant and their pathogens. 21. Pyricularia oryzae. 22. Physiology, genetics and biology of aquatic organisms (especially fishes and cnidarians); reef ecology; recruitment and replenishment dynamics of marine organisms 23. Humen-ecological interactions and conservation; marine conservation and resource use policy and practice 24. Impact assessment and ecosystem recovery, both natural and assisted; assessment, technological adaptation and policy development for vulnerable marine and coastal ecosystem; 25. Marine plastics and pollution; effect if ckimate change and habitat disruption on ecosystem integrity; mitigation and recovery 26. Wastewater treatment (organic waste, dye, heavy metal) by microalgae 27. Microalgae cultivation and utilizations 28. Microalgae cultivation for biodiesel production

C. Loosman

No.	Program / Scope and Specialized field of Research
Faculty of Agriculture Technology (Cont.)	
	29. Animal virus and host cell interaction 30. Antibody technology and animal vaccine development 31. Cellular biotechnology for antigen and antibody production 32. Gut health and immune modulation against virus and bacterial infection 33. Development of detection technology for virus infection 34. Other related fields.
Faculty of Science	
10	Doctor of Philosophy (Applied Mathematics) 1. Numerical Linear Algebra : Iterative method for matrix equations. Householder transformation and application to matrix decomposition 2. Geometry : Finsler geometry, Riemannian metrics 3. Matrix Theory : Matrix (fractional) differential equation, Matrix equations, Matrix inequalities, Matrix means, Matrix products 4. Operator Theory : Operator means, Operator products, Operator inequalities 5. Real Analysis : Operator monotone functions and Borel measures 6. Other related fields.
11	Doctor of Philosophy (Applied Chemistry) 1. Conversion of plam oil FAMES to bio-based chemicals and fuels 2. Ethanol and Biomass derivatives Conversion over Zeolite Catalysts 3. Gas Adsorption & Diffusion on Zeolites and its Applications in Gas Separation Process 4. Biomass conversion over heterogeneous catalysts 5. Light alkane conversion for petrochemical feedstock and liquid fuel 6. The development of catalysts for chemical production. 7. Catalyst, Catalysis, Biomass conversion, Sustainable chemistry, Fatty acid methyl ester, Metathesis Highly dispersed metal oxide catalysts. 8. Other related fields.

C. Lakshminath

No.	Program / Scope and Specialized field of Research
Faculty of Science (Cont.)	
12	<p>Doctor of Philosophy (Biotechnology)</p> <ol style="list-style-type: none"> 1. Protein and enzyme chemistry 2. Protein X-ray structure determination 3. Genetic engineering 4. Bioenergy production 5. Algal Biotechnology 6. Gene expression regulation and mutant creation 7. Phytochemistry 8. Separation and quantification 9. Other Biochemistry and Molecular Biology related field 10. Other related fields.
Faculty of Food Industry	
13	<p>Doctor of Philosophy (Food Science) (International Program)</p> <ol style="list-style-type: none"> 1. Food Chemistry. 2. Food Enzymes. 3. Functional Foods and Nutraceuticals. 4. Culinary Science. 5. Food and Agricultural Engineering. 6. Postharvest Technology. 7. Nondestructive evaluation techniques. 8. NIR spectroscopy. 9. Physicochemical properties of flour, starch, rice and cereals. 10. Development of flour and starch-based products. 11. Study on modification of flour and starch to be resistant starch. 12. Healthy starch and flour: low glycemic index starch and flour and their products. 13. Science of bakery: ingredients and processing. 14. Development of healthy bakery products. 15. Other related fields.

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No.	Program / Scope and Specialized field of Research
Faculty of Information Technology	
14	<p>Doctor of Philosophy (Information Technology)</p> <ol style="list-style-type: none"> 1. Machine learning algorithms e.g., computer vision, natural language processing, chemoinformatics, bioinformatics, health informatics, patten recognition, time series analysis, etc. 2. Evolutionary Algorithm 3. Swarm Intelligence 4. Bio-inspired Algorithm 5. Neural Networks 6. Fuzzy systems 7. Computational Intelligences 8. Optimization 9. Data Mining 10. Other related fields.
KMITL Business School	
15	<p>Doctor of Philosophy (Industrial Business Administration) (International Program)</p> <ol style="list-style-type: none"> 1. Human Resorce Management; Organization Development; Industrial Management; Logistics & Supply Chain Management 2. My specialization include Retail marcting, mources Research, Business Innovative, Techstentup+Entrepreneurship Theory+Practise, Brand management, mouceting Theories and applications. 3. Other related fields.
College of Nanotechnology	
16	<p>Doctor of Philosophy (Nanoscience and Nanotechnology)</p> <ol style="list-style-type: none"> 1. Hybrid nanomaterials for recyclable and ultrasensitive surface - enhanced Raman scattering platform and sending applications. 2. Hybrid carbon nanomaterials for wearable energy devices: Supercapacitors and triboelectric nanogenerators 3. Other related fields.

C. Laosnathan

No.	Program / Scope and Specialized field of Research
College of Advanced Manufacturing Innovation	
17	<p>Doctor of Philosophy (Advanced Manufacturing System Engineering)</p> <ol style="list-style-type: none">1. Magnetic Recording.2. Digital Signal Processing.3. RF signal.4. Wireless communication.5. Finite Element Analysis6. Computational Fluid Dynamics7. Computer Simulation for improving manufacturing process8. Numerical Method for applied mechanic9. Other related fields.

C. Vasanthakumari